

TORONTO, CANADA.

HIGH CLASS  
FARM IMPLEMENTS

WORKS AT  
TORONTO....  
AND BRANTFORD

DISTRIBUTING AGENCIES AND WAREHOUSES  
IN ALL PARTS OF THE WORLD.

THIS LITTLE BOOK IS THE PROPERTY  
OF.....

.....

P.O. ....

Prov. ....

*Finder will confer a favor by returning it to him  
promptly.*

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## BRIEF BUT TO THE POINT.

**Massey-Harris Co.** LTD., aim to produce machines suited to the peculiar requirements of every territory. Their large staff of inventors are constantly at work seeking to develop and improve farm labor-saving machinery.

**They "run off"** and thoroughly test and inspect every machine before it is sent out, hence **MASSEY-HARRIS Co., LTD.**, can guarantee every implement bearing their name.

**Reciprocity.** If this little book has been of use to you, be so kind as to reciprocate and speak a good word for the **MASSEY-HARRIS** machines.

**"Look after details"** if you want to succeed. Every detail of every implement turned out by **MASSEY-HARRIS Co., LTD.**, receives the closest scrutiny. Well made bearings and carefully fitted parts are essential to good machines. Bright colored paint may add to the appearance and cover defects, but will not make a machine work well.

**Massey-Harris Co.** LTD., is managed by a Board of Directors made up of men who have had the longest experience and been most successful in the Farm Implement business.

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### PLEASE TAKE NOTICE.

**THIS LITTLE BOOK IS COPYRIGHTED.**

*(Entered according to the Act of the Parliament of Canada, in the year one thousand eight hundred and ninety-six, by THE MASSEY PRESS, at the Department of Agriculture at Ottawa.)*

RB 136, 988

TL2 6856

# MASSEY-HARRIS CO., Ltd.

*The Head Offices* of the Company are at Toronto, Canada.  
*The Works* are located at Toronto & Brantford, Canada.  
*Branch Offices* are located as follows:

- ONTARIO BRANCH—915 King St. West, Toronto, Ont.  
 BICYCLE DEPT.—927-931 King St. West, Toronto, Ont.  
 NORTH-WEST BRANCH—Princess St., Winnipeg, Man.  
 QUEBEC BRANCH—640 St. Paul St., Montreal, Que.  
 MARITIME BRANCH—31-35 Germain Street, St. John, N.B.  
 EUROPEAN BRANCH—54 & 55 Bunhill Row, London, Eng.  
 AUSTRALASIAN BR.—163-169 William St., Melbourne, Vic.  
 NEW ZEALAND BRANCH—Crawford St., Dunedin, N.Z.

## ACREAGE TABLE.

An acre is 4,840 square yards, or 69 yards, 1 foot, 8 $\frac{1}{2}$  inches each way; and 2 acres or 9,680 square yards are 98 yards, 1 foot, 2 inches each way; and 3 acres are 120 $\frac{1}{2}$  yards each way. A square mile or a Canada section of land is 640 acres, being 1,760 yards each way; half a mile, or 880 yards each way, is 160 acres; a quarter of a mile, or 440 yards each way, is a park or farm of 40 acres; and a furlong, or 220 yards each way, is 10 acres.

## NUMBER OF PLANTS FOR AN ACRE OF GROUND.

1 foot by 1 foot....	43,560	5 $\frac{1}{2}$ feet by 5 $\frac{1}{2}$ feet...	1,417
1 $\frac{1}{2}$ feet by 1 $\frac{1}{2}$ feet...	19,360	6 feet by 6 feet....	1,210
2 feet by 1 foot....	21,780	6 $\frac{1}{2}$ feet by 6 $\frac{1}{2}$ feet...	1,031
2 feet by 2 feet....	10,890	7 feet by 7 feet....	881
2 $\frac{1}{2}$ feet by 2 $\frac{1}{2}$ feet...	6,960	8 feet by 8 feet....	680
3 feet by 1 foot....	14,520	9 feet by 9 feet....	537
3 feet by 2 feet....	7,260	10 feet by 10 feet...	435
3 feet by 3 feet....	4,840	11 feet by 11 feet...	360
3 $\frac{1}{2}$ feet by 3 $\frac{1}{2}$ feet...	3,555	12 feet by 12 feet...	302
4 feet by 1 foot....	10,890	13 feet by 13 feet...	257
4 feet by 2 feet....	5,445	14 feet by 14 feet...	222
4 feet by 3 feet....	3,630	15 feet by 15 feet...	193
4 feet by 4 feet....	2,722	16 feet by 16 feet...	170
4 $\frac{1}{2}$ feet by 4 $\frac{1}{2}$ feet...	2,151	16 feet by 16 $\frac{1}{2}$ feet..	160
5 feet by 1 foot....	8,712	17 feet by 17 feet...	150
5 feet by 2 feet....	4,356	18 feet by 18 feet...	134
5 feet by 3 feet....	2,904	19 feet by 19 feet...	120
5 feet by 4 feet....	2,178	20 feet by 20 feet...	108
5 feet by 5 feet....	1,742	25 feet by 25 feet...	69

## SEED TO THE ACRE.

The opinions of farmers differ materially; and then the climate and soil have much to do with the quantity. The quantity of seed sown broadcast to the acre is about as follows:

Wheat.....	1 $\frac{1}{2}$ to 2 bush.	Hemp.....	1 to 1 $\frac{1}{2}$ bsh.
Barley.....	1 $\frac{1}{2}$ to 2 $\frac{1}{2}$ "	Flax.....	$\frac{1}{2}$ to 2 "
Oats.....	2 to 4 "	Timothy.....	12 to 24 qts.
Rye.....	1 to 2 "	Red Top.....	12 to 16 "
Buckwheat..	$\frac{3}{4}$ to 1 $\frac{1}{2}$ "	Flat Turnip...	2 to 3 lbs.
Millet.....	1 to 1 $\frac{1}{2}$ "	Red Clover ...	10 to 16 "
Indian Corn	1 to 2 "	White Clover..	3 to 4 "
Beans.....	2 to 3 "	Ken. Blue Grs.	10 to 15 "
Peas .....	2 $\frac{1}{2}$ to 3 $\frac{1}{2}$ "	Orchard Grass	20 to 30 "

**VERITY PLOWS  
AND  
GARDEN SCUFFLERS.**



**No. 2 SCUFFLER.**

**No. 14 V  
PLOW.**



**SHRINKAGE OF GRAIN.**

Farmers rarely gain by keeping their grain after it is fit for market, when shrinkage is taken into account. Wheat, from the time it is threshed, will shrink two quarts to the bushel, or 6 per cent. in six months, under most favorable circumstances. Hence it follows that 94 cents a bushel for wheat when first threshed in August, is as good, taking into account shrinkage alone, as one dollar in the following February. Corn shrinks much more from time it is first husked. One hundred bushels of ears, as they come from the field in November, will be reduced to not far from eighty. So that 40 cents a bushel for corn in the ear from the field is as good as 50 in March, shrinkage alone being taken into account. In the case of potatoes, taking those that rot and are otherwise lost, together with shrinkage, there is but little doubt that between October and June the loss to owner, who holds them is not less than 33 per cent. This estimate is taken on basis of interest at 7 per cent., and takes no account of loss by vermin.

**GRAIN MEASURE.**

Grain is generally sold by weight, as under:

- 34 pounds....make 1 bushel of oats.
- 48 pounds....make 1 bushel of buckwheat.
- 48 pounds....make 1 bushel of barley or timothy.
- 60 pounds....make 1 bushel of beans.
- 56 pounds....make 1 bushel of rye or Indian corn.
- 60 pounds....make 1 bush. of wheat, peas or red clover.

**MEASUREMENT OF HAY.**

A ton of hay is 512 cubic feet in the mow, that is when it has settled down and become solid.

To measure hay in the mow, multiply the length, height, and width in yards, and divide by 15 if the hay is well packed; if the mow is shallow and the hay recently placed therein, divide by 18, and by any number from 15 to 18, according as the hay is well packed.

**PROPERTIES OF THE CIRCLE.**

Circumference=diameter multiplied by 3.1416 or  $3\frac{1}{7}$ .  
Diameter multiplied by .8862=side of an equal square.  
Diameter multiplied by .7071=side of an inscribed square.  
Diameter multiplied by itself and again multiplied by .7854=area of circle. Radius multiplied by 6.2832=circumference.

# VERITY PLOWS AND SCUFLERS have won a world-wide renown.

They are used in every part of Canada, are shipped in large quantities to foreign countries. Their good reputation has been built up on their solid worth. The best of steel and the best of workmanship. Verity Holding or Walking Plows, Verity Sulky or Riding Plows, and Verity Horse Hoes or Scufflers are for sale by MASSEY-HARRIS Agents the world over. The Verity Plow Works are fitted with the fuel oil system.

*Less for Aug 12*

1.	13.	21.	247
1.	"	20.	227.
1	"	36.	750
1	"	34.	650
1	"	31.	570
1	11	30.	411
1	16	31.	710
1	16	30.	658

4262  
+ 23

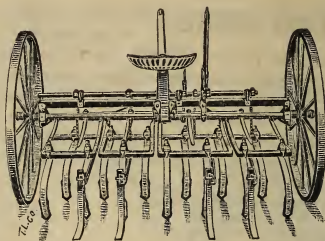
~~21310~~  
~~8524~~  
~~4262~~

4,262 \$5 per the wheel

\$21310

**M** Fitzgerald & Co

Feb 21 1895  
J. H. Green



**MASSEY-  
-HARRIS**  
SOLID STEEL  
**CULTIVATOR.**

2 ROWS TEETH.

REVERSIBLE  
POINTS.

**SQUARE BOX MEASURE.**

A box 24 by 16 inches square, and 28 inches deep, will contain a barrel (five bushels shelled corn).

A box 24 by 16 inches square, and 14 inches deep, will contain half a barrel.

A box 16 by  $16\frac{3}{4}$  inches square, and 8 inches deep, will contain one bushel.

A box 12 by  $11\frac{1}{4}$  inches square, and 8 inches deep, will contain half a bushel.

A box  $8\frac{1}{4}$  by  $8\frac{1}{4}$  inches square, and 8 inches deep, will contain a peck.

A box  $8\frac{1}{4}$  by  $8\frac{1}{4}$  inches square, and 4 inches deep, will contain one gallon.

A box  $8\frac{1}{4}$  by  $4\frac{1}{4}$  inches square, and 4 inches deep, will contain half a gallon.

A box 4 by  $4\frac{1}{4}$  inches square, and 4 inches deep, will contain one quart.

**SUNDRY MEASURES.**

*Surveyor's Measure*:—7.92 inches=1 link; 100 links=1 chain (4 rods or 66 feet); 80 chains=1 mile.

*Measures of Volume*:—1 gallon, liquid measure=231 cubic inches; 1 gallon, dry measure=268.8 cubic inches; 1 imperial gallon=277 cubic inches. 274 cubic inches=1.2003 standard gallons.

*Metrical and English Measures*:—1 metre equals 39.37 in. 1 kilogram, 2.20473 lbs. 1 litre equals 1 cubic decimeter or .908 qts. dry measure or 1.0566 qts. liq. measure.

**MISCELLANEOUS WEIGHTS.**

A barrel weighs—of Flour 196 lbs., Salt 280 lbs., Beef 200 lbs., Pork 200 lbs., Fish 200 lbs. A keg of Powder weighs 25 lbs.; Stone of Lead or Iron, 14 lbs.; Pig of Lead or Iron,  $21\frac{1}{2}$  stone.

Anthracite coal, broken, cubic foot averages 54 lbs. A ton, loose, occupies 40 to 43 cubic feet.

Bituminous coal, broken, cubic foot averages 49 lbs. A ton, loose, occupies 43 to 48 cubic feet.

Cement, (Hy.) Portland, Bush. weighs.....96 lbs.

Lime, loose, " " ..... 70 "

" well shaken, " " ..... 80 "

Sand at 98 lbs. per cu. ft. " " .....  $122\frac{1}{2}$  "

18.29 bush.=ton.

1.181 ton=cu. yd.



**THE MASSEY-HARRIS CULTIVATOR** has been a phenomenal success, and is now used the world over, being as much prized by the British, German and French farmers as it is by the Canadian agriculturalist. It has exceeded the most sanguine expectations. It is so fully protected by so many patents that attempted copies and imitations do not compare with it. It was the original sectional Spring Tooth Cultivator, and is singularly unique. The pressure device is perfection, and the recent improvements—2 rows of Teeth and Reversible Points—"cap the climax."



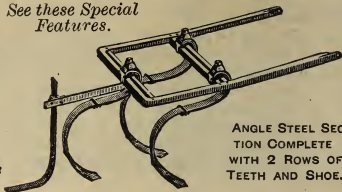
Lacy Lyons br 4  
 1896 to Balmer \$7.12  
 1897 2 2 legs 3.44  
 Balmer \$10.56  
  
 1st by 22 - 13 = 272  
 1 26 13 = 400  
                     6.80  
                     \$344.00  
 Balmer due \$10.56  
 March 16, 1897

## MASSEY-HARRIS CULTIVATOR.

*See these Special Features.*



TOOTH AND HELPER



ANGLE STEEL SECTION COMPLETE WITH 2 ROWS OF TEETH AND SHOE.

## SHORT GRAMMAR.

Three little words you often see  
Are Articles—A, AN, and THE.

A Noun's the name of any thing,  
As SCHOOL or GARDEN, HOOP or SWING.

Adjectives tell the kind of noun,  
As GREAT, SMALL, PRETTY, WHITE or BROWN.

Instead of nouns the pronouns stand—  
His head, HER face, YOUR arm, MY hand.

Verbs tell something to be done—  
To READ, COUNT, LAUGH, SING, JUMP, or RUN.

How things are done the adverbs tell—  
As SLOWLY, QUICKLY, ILL, or WELL.

Conjunctions join the words together,  
As men AND women, wind OR weather.

The preposition stands before  
The noun, as IN or THROUGH the door.

The interjection shows surprise—  
As OH, how pretty ! AH, how wise !

The whole are called nine parts of speech,  
Which reading, writing, speaking teach.

## RESULTS OF SAVING MONEY.

The following shows how easy it is to accumulate a fortune, if proper steps are taken. The table shows the result at the end of 50 years by saving a certain amount each day and putting it at interest at rate of 6 per cent.

DAILY SAVINGS.	THE RESULT.	DAILY SAVINGS.	THE RESULT.
One cent .....	\$ 950	Sixty cents.....	\$ 57,024
Ten cents.....	9,504	Seventy cents....	66,528
Twenty cents .....	19,006	Eighty cents .....	76,032
Thirty cents.....	28,512	Ninety cents.....	85,537
Forty cents.....	38,015	One dollar.....	95,041
Fifty cents .....	47,520	Five dollars.....	475,208

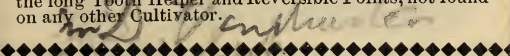
Nearly every person wastes enough in 20 or 30 years, which, if saved and carefully invested, would make a family independent ; but the principle of small savings has been lost sight of in the general desire for wealth.



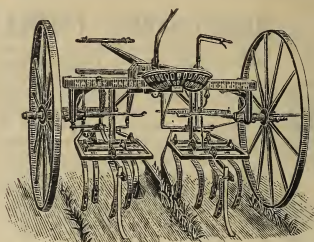
# MASSEY-HARRIS CULTIVA-

**TOR.** The pressure device shown in the cut is the simplest, most effective, and most complete ever designed. One lever does it all—applying the pressure little or much, as desired, or, when reversed, lifting the teeth for transportation. Note the splendid construction of the Angle Steel Section on the previous page, also

the long Tooth Helper and Reversible Points, not found on any other Cultivator.



25-13-  
23-15-  
373  
358  
726 A  
40  
\$2,900.00  
Mr. Carr to field  
J.H. Carr



MASSEY-HARRIS

## CORN AND BEAN IMPLEMENT.

A new tool of rare  
capabilities.

### AMOUNT OF BARBED WIRE REQUIRED FOR FENCES.

Estimated number of pounds of barbed wire required to fence space or distances mentioned with one, two, or three lines of wire, based upon each pound of wire measuring one rod ( $16\frac{1}{2}$  feet).

	1 Line.	2 Lines.	3 Lines.
1 Square Acre.....	50 $\frac{3}{4}$ lbs.	101 $\frac{1}{3}$ lbs.	152 lbs.
1 Side of a Square Acre....	12 $\frac{3}{4}$ "	25 $\frac{1}{3}$ "	38 "
1 Square Half-acre.....	36 "	72 "	108 "
1 Square Mile .....	1280 "	2560 "	3840 "
1 Side of a Square Mile ....	320 "	640 "	960 "
1 Rod in Length .....	1 "	2 "	3 "
100 Rods in Length.....	100 "	200 "	300 "
100 Feet in Length .....	6 $1\frac{1}{16}$ "	12 $\frac{1}{8}$ "	18 $3\frac{1}{16}$ "

### APPROXIMATE STRENGTH AND WEIGHT OF MANILLA ROPE,

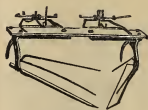
AS CONTAINED IN THE FOLLOWING TABLE.

The best rope made will be quickly destroyed by allowing it to become wet and then putting it in a damp cellar or room where there is no circulation of air.

For direct pulls on a single manilla rope, it is safe when in constant use to put it at work at only  $1/20$  its breaking strain.

Circumference in inches.	Diameter in inches.	Breaking strain in lbs.	No. of feet per lb.
$\frac{3}{4}$	$\frac{1}{4}$	450	38
1	$5/16$	800	28
$1\frac{1}{8}$	$3/8$	1000	22
$1\frac{1}{2}$	$1/2$	1800	12
2	$5/8$	3200	7 $\frac{1}{2}$
$2\frac{1}{4}$	$3/4$	4000	6
$2\frac{1}{2}$	$7/8$	5000	4
3	1	7200	3 $\frac{1}{3}$
$3\frac{3}{4}$	$1\frac{1}{4}$	11200	2.1/6
4 $\frac{1}{2}$	$1\frac{1}{2}$	16200	1 $\frac{1}{4}$

*Rope Measure*:—6 feet = 1 fathom ; 120 fathoms = 1 cable length.

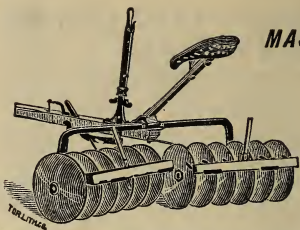


BEAN HARVESTER  
ATTACHMENT.

## MASSEY-HARRIS CORN AND BEAN IMPLEMENT

can also be used as a general Cultivator, having Tooth-Carrying Sections like the Massey-Harris Cultivator. The width of the tread can be readily changed to suit the different forms of cultivating, and every desirable adjustment can

be made to accommodate the machine to the condition of crop and land. The Bean Harvester Attachment is illustrated above.

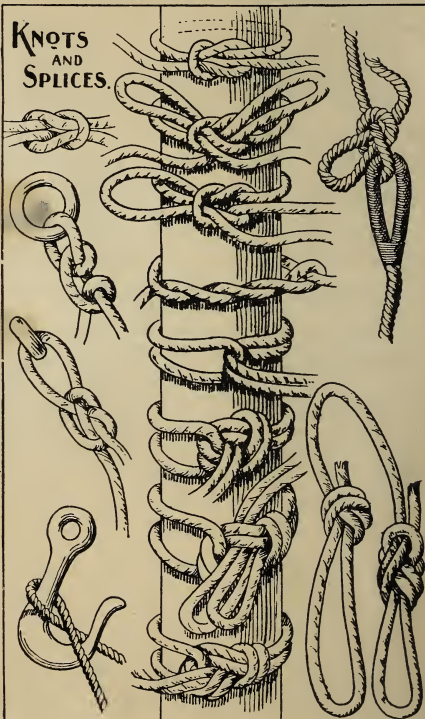


MASSEY-HARRIS

DISK -

HARROW

**KNOTS  
AND  
SPICES.**





SLICER DISK.



## MASSEY-HARRIS DISK HARROW.

This Harrow is built under the Corbin & Hill patents, which cover all the essential features of a successful Disk Harrow. **Ball Bearings** make it run light, and add to its durability. The **Steel Beam** makes it very strong. The Harrow is well bal-

anced and very flexible. **The Disks** have a soft centre and hard edge. The steel surface and clod catchers keep the disks clean. It is made to cut 6 or 7 foot wide as desired. Weight Box furnished when specially ordered.

# MASSEY-HARRIS STEEL HARROWS.



SPRING TOOTH  
AND  
DRAG.



## WIRE-WEIGHT OF 100 LINEAL FEET.


B. W. Gauge.	Dia. Dec. 1 in.	Iron.	Steel.	Brass.	Copper.
		lbs.	lbs.	lbs.	lbs.
0	.325	30.58	30.92	33.43	35.17
1	.303	25.75	26.04	28.15	29.62
2	.280	21.34	21.57	23.32	24.54
3	.258	18.02	18.22	19.70	20.72
4	.238	15.11	15.28	16.52	17.38
5	.218	12.46	12.59	13.62	14.33
6	.200	11.45	11.57	12.51	13.16
7	.182	9.25	9.35	10.11	10.64
8	.165	7.29	7.37	7.97	8.38
9	.149	6.60	6.68	7.22	7.59
10	.134	4.96	5.02	5.43	5.71
11	.120	4.13	4.18	4.52	4.75
12	.107	3.14	3.18	3.43	3.61
13	.095	2.34	2.36	2.55	2.69
14	.084	1.69	1.71	1.85	1.95
15	.073	1.37	1.39	1.50	1.58
16	.065	1.05	1.06	1.15	1.21
17	.058	.804	.815	.877	.928
18	.050	.612	.622	.674	.704
19	.043	.471	.478	.510	.547
20	.037	.326	.331	.342	.372
21	.032	.271	.274	.293	.310
22	.029	.208	.210	.224	.237
23	.026	.166	.167	.179	.189
24	.023	.128	.129	.138	.147
25	.021	.106	.107	.114	.121

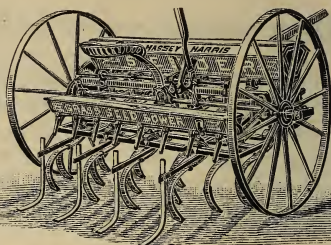
## WATCHES AS COMPASSES.

Watches may be used as compasses any sunshiny day between the hours of 8 a.m. and 4 p.m., by pointing the hour hand to the sun, when south is exactly half way between hour and figure XII on watch. As, at 4 p.m., pointing the hand at IIII to the sun, the figure II is exactly south; at 8 a.m., the hand at VIII being pointed to the sun, the figure X is due south. The greatest error in latitude 38° is about 15' too far east at 8 a.m., and 15' too far west at 4 p.m.; figure accordingly.



**MASSEY-HARRIS HARROWS** are sold in very large quantities, and are well and favorably known. The Spring Tooth Harrows are of two sorts. (1) "Patterson" type, with wood frame, steel plated, 12 teeth, and (2) Solid Steel Frame Harrows, with 12, 16 and 18 teeth. The Steel Tooth Diamond Harrow is made in 3, 4 or 5 sections, cutting 10 feet, 13 feet 6 in., or 17 feet wide.





MASSEY-  
-HARRIS  
SECTIONAL  
SEEDER.

NUMBER OF NAILS AND TACKS PER POUND.

NAILS.	Size.	No. per lb.	TACKS.	Length.	No. per lb.
6 penny, fence	2 in.	80	1 oz ...	$\frac{1}{8}$ in ...	16,000
8 " "	$2\frac{1}{2}$ "	50	$1\frac{1}{4}$ " ...	$\frac{3}{16}$ " ...	10,666
10 " "	3 " "	34	2 " ...	$\frac{1}{2}$ " ...	8,000
12 " "	$3\frac{1}{4}$ "	39	$2\frac{1}{2}$ " ...	$\frac{5}{16}$ " ...	6,000
3 " fine	$1\frac{1}{4}$ "	480	3 " ...	$\frac{3}{8}$ " ...	5,333
4 " "	$1\frac{1}{2}$ "	300	4 " ...	$\frac{7}{16}$ " ...	4,000
5 " "	$1\frac{3}{4}$ "	200	6 " ...	$\frac{9}{16}$ " ...	2,666
6 " "	2 " "	160	8 " ...	$\frac{5}{8}$ " ...	2,000
7 " "	$2\frac{1}{4}$ "	128	10 " ...	$\frac{11}{16}$ " ...	1,600
8 " "	$2\frac{1}{2}$ "	92	12 " ...	$\frac{3}{4}$ " ...	1,333
9 " "	$2\frac{3}{4}$ "	72	14 " ...	$\frac{13}{16}$ " ...	1,143
10 " "	3 " "	60	16 " ...	$\frac{7}{8}$ " ...	1,000
16 " "	$3\frac{1}{2}$ "	32	18 " ...	$\frac{15}{16}$ " ...	888
20 " "	4 " "	24	20 " ...	1 " ...	800
30 " "	$4\frac{1}{2}$ "	18	22 " ...	$1\frac{1}{16}$ " ...	727
40 " "	5 " "	14	24 " ...	$1\frac{1}{8}$ " ...	666
50 " "	$5\frac{1}{2}$ "	12			

CAPACITY OF CISTERN, IN GALLONS, FOR EACH  
10 INCHES IN DEPTH.

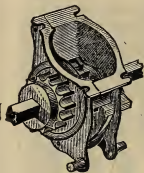
Dia. in ft	Galls.	Dia. in ft	Galls.	Dia. in ft	Galls.	Dia. in ft	Galls.
2	19.5	$5\frac{1}{2}$	148.1	9	396.56	15	1,101.6
$2\frac{1}{2}$	30.5	6	176.25	$9\frac{1}{2}$	461.4	20	1,958.4
3	44.6	$6\frac{1}{2}$	206.65	10	489.6	25	3,059.9
$3\frac{1}{2}$	59.97	7	239.88	11	592.4	30	4,406.4
4	78.33	$7\frac{1}{2}$	275.4	12	705.	35	5,990
$4\frac{1}{2}$	99.14	8	313.33	13	827.4	40	7,831
5	122.4	$8\frac{1}{2}$	353.72	14	959.6		

STRENGTH OF ICE.

A thickness of 2 inches will allow the passage of men in single file on a line of planks placed on the ice. No other row of planks should be placed nearer than 6 ft.

A thickness of 5 inches will allow passage of cavalry, or light guns, with a moderate interval between each.

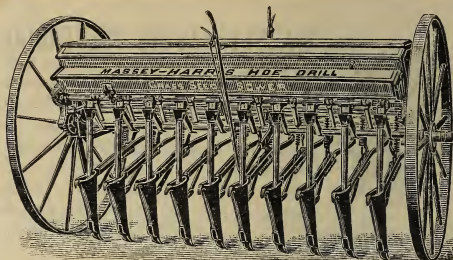
A thickness of 10 to 12 inches will support the heaviest loads ever likely to pass over it.



## MASSEY-HARRIS SECTIONAL SEEDER.

A seed box for grain and also for grass seed is made for attachment to the Massey-Harris Cultivator, when the machine is known as THE MASSEY-HARRIS SECTIONAL SEEDER. There is no broadcast Seeder to equal it; the peculiar springing motion of the teeth cover-

ing the seed perfectly. The gearing is very simple. The feed run or distributor is shown above.



### VELOCITY OF MOVING BODIES.


	Miles per hour.	Feet per sec.
Rifle ball.....	1,000	1,466
Sound .....	743	1,142
Hawk .....	150	218
Eider duck .....	90	131
Hurricane .....	80	117
Pigeon .....	40	58
Horse runs.....	20	29
Steamboat .....	18	26
Sailing vessel.....	10	14
Rapid river	7	10
Moderate wind }		
Horse trots		
Man walks, Slow river .....	3	4
Electricity .....	288,000 miles per second	
Light .....	192,000 miles per second	

### VELOCITIES AND EFFECTS OF WIND.

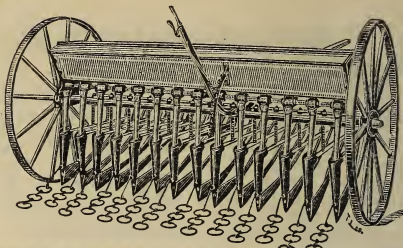
Miles per Hour.	Pressure per sq. ft. in lbs.	Characteristics.
1	0.005	Hardly perceptible.
2	0.020	Just perceptible.
5	0.123	Gentle breeze.
10	0.492	Brisk wind.
20	1.968	} Very brisk wind.
25	3.075	
35	6.027	
45	9.963	High wind.
50	12.300	Very high wind.
60	17.715	Storm.
80	31.490	Great storm.
100	49.200	Hurricane.
180	....	Great hurricane, carrying trees before it.
		Cyclone.

### EXPECTANCY OF AGE.

Where the age is over 24 and under 75, the expectancy of life may be determined with reasonable accuracy by adding to the age  $\frac{2}{3}$  of the difference between the age and 80. Example: Age 38. Difference between 38 and 80 = 42.  $\frac{2}{3}$  of 42 = 28 + (age) 38 = 66 years (expectancy).



Seeding and Drilling can be done with equal facility on this eminently successful combined machine. As a Drill it stands without an equal, having every useful adjustment to adapt it to any and every condition of land, while the Seeding Device is most complete for all kinds of grain. As a Broadcast Sower it has every facility for perfect work. The method of removing and attaching the Hoes or Teeth is shown above.



MASSEY-  
HARRIS  
SHOE  
DRILL

### WEATHER WISDOM.

**SUNSET COLORS.**—A gray, lowering sunset, or a green or yellowish-green sky, or a red sunrise, with clouds lowering later in the morning, indicates rain.

**HALO (SUN-DOGS).**—A halo (large circles about the sun or moon) after fine weather indicates a storm.

**CORONA.**—A Corona (the small colored circles frequently seen around the sun or moon), growing smaller, indicates rain; growing larger, fair weather.

**RAINBOWS.**—A morning rainbow is regarded as a sign of rain; an evening rainbow, of fair weather.

**SKY COLOR.**—A deep-blue color of the sky, even when seen through clouds, indicates fair weather; a growing whiteness, an approaching storm.

**FOGS.**—Fogs indicate settled weather. A morning fog usually breaks away before noon.

**VISIBILITY.**—Unusual clearness of the atmosphere, unusual brightness or twinkling of stars, indicate rain.

**CLOUDS.**—In observing clouds, we distinguish their textures, motions, and outlines. 1st order, *Cirrus*, frequently called "mare's-tails." They appear at a greater elevation than other forms of clouds, and are marked by their light texture, fibrous and sundered, as in the "mare's-tail," or interlacing as in the far-spreading white cloud which produces the halo. Small, regularly formed groups of these clouds are frequently seen in fair and settled weather. The *Cirri* are also the clouds on the fore-part of the storm. In this case they are usually more abundant, their outline is very ragged, and they generally blend into a white, far-reaching cloud-bank. 2nd order, *Cumulus*, well known as "cotton bales" or "thunder heads:" they are of a hemispherical form, with horizontal base. When they appear during the heat of the day and pass away in the evening, continued fair weather may be expected. When they increase with rapidity, sink into the lower part of the atmosphere, and remain as evening approaches, rain is at hand. If loose patches appear thrown out from their surfaces, showers may be expected. 3rd order, *Stratus*. These appear as a continuous layer of widely extended sheet of cloud, at a lower level than the *Cumulus*, their lower surface often resting on the earth.

**FROST.**—The first frost and last frost are usually preceded by a temperature very much above the mean.



## MASSEY-HARRIS SHOE DRILL.



The Shoes cut a knife track in the soil into which the seed falls, the Drag Chains covering it in perfectly, thus the seed is really planted. This machine is of very simple, yet very complete construction. The cut shows the operation of the Controlling and Pressure Lever, also the splendid connection of the Steel Shoes to the Frame. The new Telescopic Metallic Conductors substituted for perishable Rubber Tubes are important.



# **TORONTO MOWER** **No. 2.**

## **READY RECKONER TABLE.**

For computing wages, rent, board, etc. The sum will be found heading the columns, and the days and weeks on the extreme left-hand column. If the desired sum is not in the table, double or treble two or three suitable numbers.

		TIME.			TIME.
Weeks.	Days.		Weeks.	Days.	
1	1	.71	1	1	.36
2	2	1.43	2	2	.72
3	3	2.14	3	3	1.08
4	4	2.86	4	4	1.44
5	5	3.57	5	5	1.80
6	6	4.28	6	6	2.15
1	1	5.00	1	1	2.50
2	2	5.25	2	2	5.09
3	3	10.50	3	3	7.50
4	4	15.75	4	4	10.00
5	5	20.00	5	5	12.50
6	6	25.00	6	6	13.75
		26.25			
		27.50			
		28.75			
		30.00			
		31.25			
		32.50			
		33.50			
		35.00			
		40.00			



**TORONTO MOWER No. 2.**

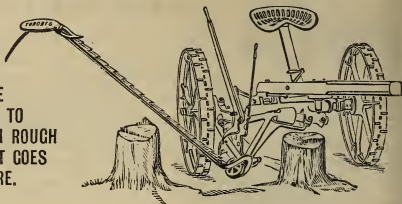
Years of hard service in every section of country, on all kinds of land, have shown the wonderful

TORONTO MOWER to be a machine of marvellous capacity, great durability, and to have the greatest flexibility and adaptability of any Mower ever made. The only two Gear Wheels on this machine are illustrated above. There are thousands upon thousands of happy possessors of TORONTO MOWERS.



## TORONTO MOWER No. 2.

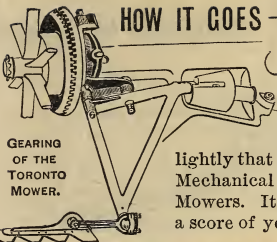
JUST THE  
MACHINE TO  
WORK ON ROUGH  
LAND. IT GOES  
ANYWHERE.



### OUTLINE OF CANADIAN HISTORY.

1492. Christopher Columbus landed on San Salvador, one of the Bahama Islands.
1497. John Cabot landed on the coast of Newfoundland, which he was the first to see.
1608. Samuel de Champlain laid the foundation of the present city of Quebec, by erecting a few wooden dwellings and a rude fort.
1632. Treaty of St. Germain-en-Laye made, whereby war between France and England was settled, and Canada, Acadia and Cape Breton were given back to France.
1635. Samuel de Champlain, one of Canada's best and earliest friends, died.
1678. La Salle sailed from Cataraqui to mouth of Niagara River in the first vessel on Lake Ontario.
1697. Treaty of Ryswick made, which closed the war known as "King William's War," between the English and French in Canada.
1713. France surrendered to England, Acadia, Newfoundland, the Hudson Bay Territory and the sovereignty over the Iroquois, by the terms of the Treaty of Utrecht.
1731. Portions of the North-West explored by a party of merchants.
1749. Halifax founded and named after the Earl of Halifax, who acted as patron to the colony at this period.
1752. The first exportation of grain from Canada was made to France; and the first Canadian newspaper was printed.
1759. Battle on the Plains of Abraham, wherein Gen. Wolfe was killed. This struggle decided the fate of Canada, and Quebec was surrendered to the English.
1760. The whole of Canada was handed over to the British, and a few years later the Treaty of Paris was made, by which France assented to cession of her possessions in North America.
1763. The form of law and the courts so much prized in England were introduced into Canada.
1791. Canada was divided into the two provinces of Upper and Lower Canada by the Constitutional Act.

## HOW IT GOES — WHY IT GOES,

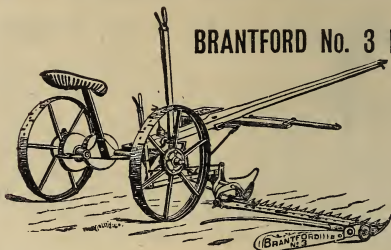


GEARING  
OF THE  
TORONTO  
MOWER.

has puzzled many people. But it does go, and goes so easily, and so well, so quietly and so

lightly that it has no equal as a Mechanical Driving Power for Mowers. It has stood the test of a score of years of service.

## BRANTFORD No. 3 MOWER



(Contd. from p. 22.)

- 1792. Trial by jury was established ; and the keeping of slaves forbidden in Upper Canada.
- 1809. The first steamboat, *Accommodation*, in Canada, was built.
- 1812. The memorable battle of Queenston Heights was fought, during which Gen. Brock was killed.
- 1821. The cutting of the Lachine canal was commenced
- 1848. The St. Lawrence canals were completed.
- 1851. A uniform rate of postage was established : three pence per half ounce ; and postage stamps were introduced.
- 1854. The Reciprocity Treaty, which provided for trade with the United States in numerous articles, and the natural products of the farm, forest and the mine—free of duty, was concluded.
- 1858. The Atlantic Cable was laid between Ireland and Newfoundland, and the Queen and the then President of the United States exchanged messages of congratulation.
- 1860. The Victoria Bridge, which spans the Montreal river at the city, was completed, and the Prince of Wales made his first visit to Canada.
- 1867. The year which saw the birth of the Dominion.
- 1871. The Washington Treaty was made, by which many matters in dispute between Canada and the United States were settled.
- 1885. The first train on the Canadian Pacific Railway ran from Montreal to Winnipeg.
- 1886. The first passage on the C.P.R., from Montreal to Vancouver, was made in 5 days and 19 hours.
- 1891. The steamship line from Vancouver to China and Japan was established.
- 1893. First steamship sailed on C.P.R. line from Vancouver to Australia.

### WHY A RIVER APPEARS MORE SHALLOW THAN IT REALLY IS.

Because the light proceeding from the bottom of the river is refracted as it emerges out of the water. A river is about one-third deeper than it seems to be. If, therefore, a river seems only  $4\frac{1}{2}$  feet deep, it is actually 6 feet deep. Many persons get out of their depth in bathing in consequence of this deception.

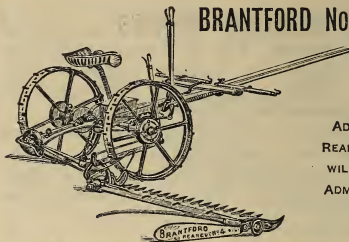




**BRANTFORD MOWERS** are splendid cutters. They have made a good reputation for themselves the world over. Every point in their construction has received careful and thoughtful consideration.

The Cutter Bar is in every sense a Floating Bar, and is perfectly flexible, following the unevenness of the ground surface and saving all the crop. The adjustments are very complete. The range of tilt is illustrated above.

## BRANTFORD No. 4 MOWER.



ADVOCATES OF A  
REAR CUT MACHINE  
WILL FIND THIS AN  
ADMIRABLE MOWER.

### TO REMOVE RUST FROM STEEL.

Steel which has been rusted can be cleaned by brushing with a paste compound of  $\frac{1}{2}$  oz. cyanide potassium,  $\frac{1}{2}$  oz. castile soap, 1 oz. whiting, and water sufficient to form a paste. The steel should be washed with a solution of  $\frac{1}{2}$  oz. cyanide potassium in 2 oz. water.

### DROWNING AND SUFFOCATION.

*Every Boy and Girl should be taught Swimming, and the means of Restoration from Drowning.*

The treatment for drowning and suffocation from gas, etc., is the same. *First*, restore breathing; *second*, promote warmth and circulation.

At once place the patient on his back in a lying position, with a pillow or coat rolled up underneath the shoulder-blades, and with the head hanging back slightly; remove any sand, or mud, or salt water, etc., from the mouth, by turning the face over to one side so that it runs out; undo all tight clothing from the neck and chest, then try and induce the action of breathing in the following manner: Take hold of the arms by elbows (standing behind the head of the patient), and draw the arms gently and steadily upward until they meet above the head (see Figure 1).

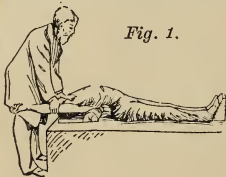


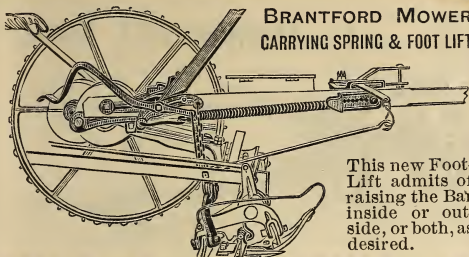
Fig. 1.



Fig. 2.

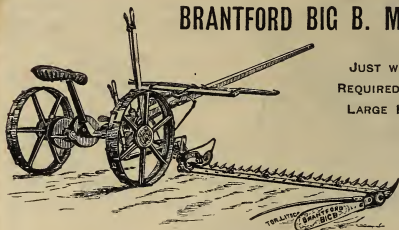
Keep the arms up in that position for two seconds, then draw down the patient's arms and press them firmly against the sides of the chest (see Figure 2); repeat these movements steadily and slowly, about 15 times in a minute, until the patient begins to breathe, or until the doctor arrives and pronounces life to be extinct.

## BRANTFORD MOWER CARRYING SPRING & FOOT LIFT



This new Foot-Lift admits of raising the Bar inside or outside, or both, as desired.

## BRANTFORD BIG B. MOWER.



JUST WHAT IS  
REQUIRED ON ALL  
LARGE FARMS.

(Contd. from p. 26.)

If there is a second person present, he can assist by placing one hand below chest and pressing gently while arms are coming down; he should also raise and rub legs. As soon as patient begins to breathe, leave off movement to induce breathing, and go on to

### *Treatment to Promote Warmth and Circulation.*

If possible, give a warm bath for five minutes; wrap the patient in warm, dry blankets; rub the limbs, under the blankets, firmly upwards. Put hot bottles or bricks to feet, to pit of stomach, under armpits. When able to swallow, give small quantities of wine and warm water, or spirit and water, or coffee. Keep the patient in bed, and let him sleep if possible. If there is distress in breathing, put a mustard plaster on chest and on back below shoulders.

**BAROMETER.**—In using the barometer we should notice whether it be greatly above or below the mean height, and the rapidity of its rise or fall. If it be higher and steady, continued fair, though not cloudless, weather may be expected. If it be lower and falling, rain, or at least damp, cloudy weather is at hand. A rapid rise or fall (greater than 0.01 inch per hour) indicates continued unsettled weather and much wind.

### A LADY'S CHANCE OF MARRYING.

Representing a woman's entire chance of marrying at one hundred, the following will be the proportions at different periods of her life:

Between the ages of 15 and 20 years.....	14½ per cent.
“ “ 20 “ 25 “ .....	52 “
“ “ 25 “ 30 “ .....	18 “
“ “ 30 “ 35 “ .....	15½ “
“ “ 35 “ 40 “ .....	3¼ “
“ “ 40 “ 45 “ .....	2½ “
“ “ 45 “ 50 “ .....	¾ of 1 “

### TO PRESERVE STEEL FROM RUST.

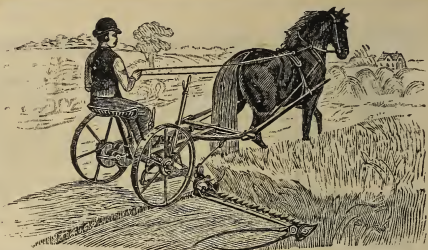
One caoutchouc, 16 turpentine. Dissolve with a gentle heat, then add 8 parts boiled oil. Mix by bringing them to the heat of boiling water; apply to the steel with a brush, in the way of varnish. It may be removed with turpentine.



## BRANTFORD MOWER DRIVE WHEELS

are broad face and high enough to insure light running. Four Pawls work in 27 teeth.

The ROLLER BEARINGS add to the life of the machine and lighten the draft. These are not cheap Mowers, and as they cost more money to build, must of necessity be sold at a higher price than common goods.



## BRANTFORD ONE-HORSE MOWER.

### TO RESTORE PERSONS AFFECTED BY COLD.

*For frost-bite or numbness.* Restore warmth gradually, in proportion as circulation in the body or parts increases.

*For a frozen limb.* Rub with snow and place in cold water for a short time. When the sensation returns, place again in cold water; add heat very gradually, by adding warm water.

*If apparently dead or insensible.* Strip entirely of clothes, and cover body, with exception of mouth and nostrils, with snow or ice-cold water. When the body is thawed, dry it, place it in a cold bed; rub with warm hands under the cover: continue this for hours. If life appears, give small injections of camphor and water; put a drop of spirits of camphor on tongue, then rub the body with spirits and water—finally with spirits; then give tea, coffee, or brandy and water.

### BURNS AND SCALDS.

In the early stage, soon after the accident, if there is no separation of the skin, allow the bladder of water, of whatever size, to remain untouched; merely dress it with a piece of linen or muslin, lightly coated with Simple Cerate.

If the skin comes off, dress the part with cotton, the object being to exclude the air and prevent suppuration. If cotton cannot be procured, apply any covering until you can have an ointment made of beeswax and sweet oil, equal parts—or lime-water and linseed-oil; or lay on scraped potatoes or carrots, or sprinkle flour on the injured surface when the above cannot be procured. Flour is troublesome to remove.

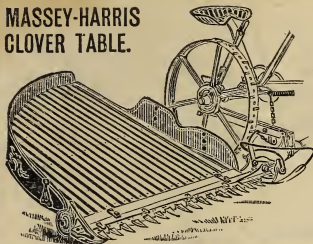
If the scald is extensive and on the body, cold applications are not proper; then use warm fomentations, or in the case of a child, the warm bath. Keep the air from the wound as much as possible; do not remove the dressing often. When a cold lotion is used, pour it upon the rags, letting them remain undisturbed.

### SUN-STROKE

Take patient immediately into the shade; place in a half-recumbent position—head raised; loosen clothes about neck and chest; apply immediately ice, or cold, wet cloths to the head and nape of the neck, changing them frequently.



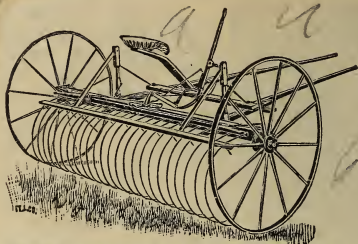
## MASSEY-HARRIS CLOVER TABLE.



This Attachment  
is made for both  
Toronto & Brant-  
ford Mowers.

It is supported  
by a Swivel Con-  
nection at the  
rear.

The seed drops  
through the slats  
on to the Table.



## SHARP'S HAY RAKE.

### CASES OF POISONING.

*Send for a physician immediately.*

In all cases of poisoning, the first step is to evacuate the stomach. This should be effected by a powerful and speedy emetic, such as powdered mustard (a large teaspoonful in tumblerful of water), or salt, or  $\frac{1}{2}$  teaspoonful powdered ipecac every 10 to 15 minutes. When vomiting has taken place, copious draughts of warm water or warm mucilaginous drinks should be given to keep up effect till poisonous substance has been evacuated.

If vomiting cannot be produced, the stomach-pump must be used.

#### POISONS.

#### ANTIDOTES.

*Acids.* The alkalis: common soap in solution is a good remedy. For nitric and oxalic acids, chalk and water are the best.

*Alkalies.* The vegetable acids: common vinegar is most used. Oil, as castor or olive, should be given in large quantities.

*Arsenic.* Any oil or fat; Magnesia in large quantities.

*Bismuth, Verdigris, Corrosive Sublimate.* White of eggs; milk freely used, or wheat flour mixed with water; followed by an emetic.

*Phosphorus.* Magnesia, with water and copious draughts of mucilaginous drinks.

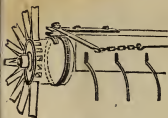
*Opium, Laudanum.* Use most active emetics, mustard, &c. Keep patient in motion. Dash cold water on head and shoulders.

### LIME WASHES.

*For outside wood-work.* In a tight bushel, slack half a bushel of fresh lime by pouring over it boiling water sufficient to cover it 4 or 5 inches deep, stir until slacked; add 2 lbs. of sulphate of zinc dissolved in water, add water enough to bring all to the consistency of thick white-wash.

*For inside work.* Add two quarts of thin size to a pailful of wash just before using. The common practice of mixing salt with whitewash should not be permitted.

*For brick or stone-work.* Slack  $\frac{1}{2}$  bushel of lime, as before, in a barrel; then fill the barrel  $\frac{2}{3}$  full of water and add a bushel of hydraulic cement; add 3 lbs. sulphate of zinc dissolved in water. These washes may be colored by adding powdered ochre, umber, &c.

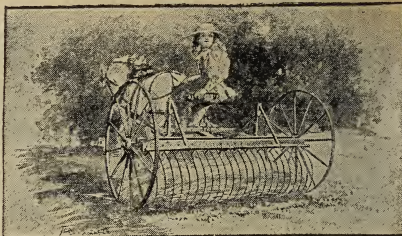


### 3 STYLES OF HAY RAKES

are made by MASSEY-HARRIS Co., LTD., suited to various conditions of crops, and different sections of country—"Sharp's," "Ithaca,"

and "Tiger." The SHARP'S RAKE continues to maintain its splendid reputation for simplicity and good workmanship. The simple Dumping Mechanism is illustrated above.

1	600	13/4	21	-
1	do	d	20	1
1		do	30	1
1		d	34	1
1		do	31	1
1	11	1	30	1
1	16	-	31	1
1	10		30	
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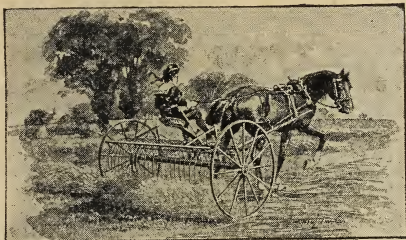


## MASSEY-HARRIS TIGER RAKE.

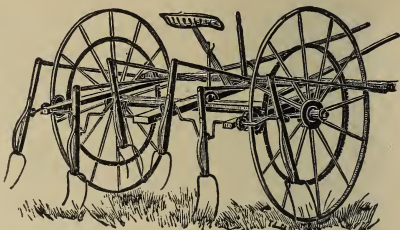
### POPULATION OF LEADING TOWNS AND CITIES.

DISTANCE AND COST OF RAILWAY FARE BETWEEN TORONTO AND SAME.

	POP.	MLS.	FARE		POP.	MLS.	FARE
Arnprior.....	3,800	277	7 75	Peterboro' ..	12,600	92	2 40
Barrie.....	6,500	64	1 95	Petrolia .....	4,591	162	4 90
Belleville....	10,200	113	3 75	Port Hope ...	5,000	63	2 10
Berlin.....	8,000	62	1 95	Prescott.....	2,919	221	7 30
Bowmanville..	3,377	43	1 45	Quebec.....	63,090	505	14 90
Brampton....	3,700	21	65	St. Cath'rin's	9,423	72	2 15
Brantford....	15,454	70	1 95	St. John, N.B.	39,179	1093	20 05
Brockville....	8,793	208	6 95	St. Mary's...	3,416	98	3 05
Chatham.....	9,000	179	5 30	St. Thomas...	11,000	131	3 65
Clinton .....	2,428	118	3 70	Sarnia .....	7,000	163	5 00
Cobourg .....	4,829	69	2 35	Seaforth .....	2,641	111	3 45
Collingwood..	5,000	94	2 85	Simcoe.....	2,727	182	2 55
Cornwall....	8,000	266	8 85	Stratford....	10,227	88	2 75
Galt .....	8,003	76	1 75	Strathroy ...	3,200	136	4 00
Gananoque....	4,000	178	6 20	Thorold.....	2,350	83	2 25
Goderich ....	4,000	133	4 05	Toronto ....	219,153		
Guelph.....	10,305	48	1 50	Trenton .....	4,000	101	3 35
Hamilton ...	48,980	40	1 20	Uxbridge ...	2,000	41	1 25
Halifax .....	38,556	1191	24 55	Walkerton...	3,061	155	3 50
Ingersoll ....	5,150	117	2 90	Welland .....	2,500	78	2 55
Kincardine ..	2,600	169	4 55	Whitby .....	2,500	30	1 00
Kingston. ...	17,348	161	5 40	Windsor ...	12,000	225	6 60
Lindsay.....	6,100	69	2 05	Woodstock ..	8,612	87	2 60
Listowell ....	2,587	116	2 95	Winnipeg ...	25,642	1404	34 60
London .....	32,571	116	3 40	Boston .....	446,507	582	13 25
Meaford.....	2,000	115	3 50	Buffalo .....	234,457	107	3 15
Mitchell.....	2,200	98	3 10	Chicago .....	1,099,133	512	12 45
Montreal....	216,250	333	10 50	Cincinnati...	296,309	529	13 85
Mnt. Forest ..	2,600	87	2 65	Cleveland...	261,546	290	8 15
Napanee .....	3,434	135	4 50	Denver.....	106,670	1672	40 60
Newmarket ..	2,300	34	1 05	Detroit.....	205,669	231	6 60
Orangeville..	2,962	49	1 50	Minn'p'lis...	164,738	928	23 95
Orillia.....	5,000	87	2 60	N. Orleans...	241,995	1502	33 70
Oshawa .....	4,068	34	1 15	New York ..	1,513,501	528	10 60
Ottawa .....	57,012	281	7 80	Rochester...	138,327	159	4 15
Owen Sound...	7,500	122	3 65	S. Frn'sco ..	297,990	2878	82 45
Paris.....	3,094	69	2 00	St. Louis ...	460,357	860	19 60
Pembroke....	4,500	330	10 85	St. Paul....	133,156	918	23 95
Perth .....	3,300	248	6 05	Wash'ton ..	229,796	555	13 80



**MASSEY-HARRIS ITHACA RAKE.**



## MASSEY-HARRIS HAY TEDDER.

### ACCIDENTS—WHAT TO DO IN EMERGENCIES.

Rules to be followed by bystanders in case of injury when surgical aid cannot be obtained. *Get a Physician.* The dangers to be feared in these cases are:—Shock or



FIG. 1.

collapse, loss of blood, wound becoming a "septic" or poisoned one, and unnecessary suffering in moving of the patient. **RULE 1.**—In shock, injured person lies pale, faint, cold, and sometimes insensible, with labored pulse and breathing. Apply external warmth by wrapping him up (not merely covering him over) in blankets, quilts, or extra clothes. Bottles of hot water, hot bricks (not too hot), may also be wrapped up in cloths and put to arm-pits, along the sides, and between the feet, if uninjured. If patient has not been drinking, give brandy or whiskey, 1 or 2 teaspoonfuls in a tablespoonful of water every ten minutes—less frequently as he gets better. Food (strong soup is best) should also be given now and then. **RULE 2.**—Loss of blood. If the patient is not bleeding, do not apply any constriction to the limb, but cover the wounded part lightly with the softest rags to be had



FIG. 2.



FIG. 3

(linen is best). If there is bleeding do not stop it by binding up the wound. The current of blood to the part must be checked. To do this find artery, by its beating lay a firm and even compress or pad (made of cloth or rags rolled up, or a round stone or piece of wood well wrapped) over the artery. (See Fig. 1.) Tie a handkerchief around limb and compress put a bit of stick through handkerchief and twist latter up until it is tight enough to stop bleeding then put one end of stick under



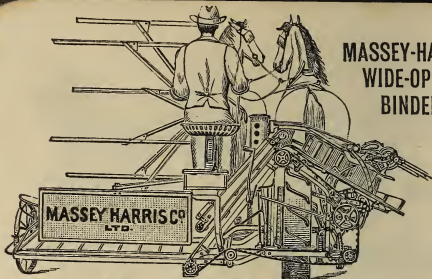
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RYWHERE  
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ASSEY HARVESTER AND BRANTFORD REAPER.







## MASSEY-HARRIS WIDE-OPEN BINDER.

(Contd from p. 36.)

handkerchief to prevent untwisting, as in Fig. 2. The artery in the thigh runs along inner side of muscle in front near the bone. A little above knee it passes to back of bone. In injuries at or above knee apply the compress higher up, on inner side of thigh, at the point where the two thumbs meet at A., Fig. 3, with a knot on outside of the thigh. When leg is injured below the



FIG 4, LEG.

knee, apply the compress at back of thigh, just above the knee as A., Fig. 4, and knot in front, as in Fig. 1 and 2. The artery in arm runs down inner side of large muscle in front, close to the bone; low down it gets further forward towards bend of the elbow. It is most easily compressed a little above the middle (A., Fig. 5). Care should be taken to examine limb from time to time, and to lessen the compression if it becomes very cold or purple, tighten up the handkerchief again if bleeding begins afresh. **RULE 3.**

To transport a wounded person comfortably, make a soft and even bed of straw for injured part, folded blankets, quilts or pillows, laid on a board, with side-pieces of board nailed on, if possible. Let the patient be laid on some firm support, properly covered. Have sufficient force to lift him steadily, and let those who bear him not keep step. **RULE 4.**—Should any important arteries be opened, apply the handkerchief as recommended. Secure the vessel by a surgeon's dressing forceps, or by a hook, then have a silk ligature put around the vessel and tie tightly. **RULE 5.**—Do not put tincture of iron or any other astringent into the wound to stop bleeding. These things make it im-

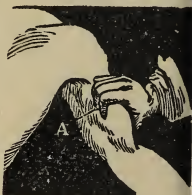
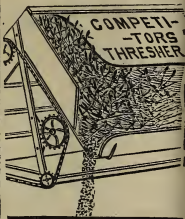
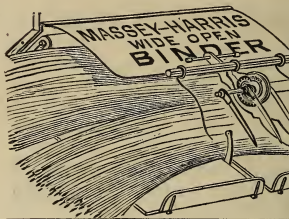


FIG. 5.

**WHEN THE MASSEY-HARRIS WIDE-OPEN BINDER** was introduced in the year 1889, competitors everywhere began to raise a cry against it. They fought against the **OPEN-END** principle most vigorously for years, but now we find some of the largest makers in England and America trying to copy this eminently successful **WIDE-OPEN** Machine.

Beware of new and untried devices made in imitation of the established and highly perfected **Wide-Open Massey-Harris Binder**. Patented Everywhere.



## OPEN BACK vs. CLOSED BACK.

(Contd. from p. 38.)

possible for healing to take place without the formation of pus or matter. Tight direct pressure with a finger tip on the mouth of the bleeding vessel will always control loss of blood until physician arrives. Above all do not let anything not absolutely clean touch the wound. The fate of an injured man is often determined by those who first try to help him. Clean wounds heal like bruises, dirty wounds always carry with them the risks of blood-poisoning. Send for a physician in all cases.

### FACTS FOR BUILDERS.

1000 shingles, laid 4 inches to the weather, will cover 100 square feet of surface, and 5 lbs. shingle nails will fasten them on.

1000 laths will cover 70 yards of surface, and 11 lbs. of lath nails will nail them on.

Eight bushels of good lime, 16 bushels of sand, and one bushel of hair, will make enough mortar to plaster 100 square yards.

A cord of stone, three bushels of lime, and a cubic yard of sand will lay 100 cubic feet of wall.

Five courses of brick will lay 1 foot in height on a chimney. 16 bricks in a course will make a flue of 4 inches wide and 12 inches long, and 8 bricks in a course will make a flue 8 inches wide and 16 inches long.

Cement, one bushel, and sand, 2 bushels, will cover  $3\frac{1}{2}$  square yards 1 inch thick;  $4\frac{1}{2}$  square yards  $\frac{3}{4}$  inch thick;  $6\frac{3}{4}$  square yards  $\frac{1}{2}$  inch thick. One bushel cement and one of sand will cover  $2\frac{1}{4}$  square yds. 1 in. thick, 3 square yds.,  $\frac{3}{4}$  inch thick, and  $4\frac{1}{2}$  square yds.,  $\frac{1}{2}$  inch thick.

### STONE-WORK.

Stone walls are measured by the perch ( $24\frac{3}{4}$  cubic feet). Openings less than 3 feet wide are counted solid, over 3 feet deducted, but 18 inches are added to the running measure for each jamb built. Arches are counted solid from their spring. Corners of buildings are measured twice. Pillars less than three feet are counted on three sides as lineal, multiplied by fourth side and depth.

It is customary to measure all foundation and dimension stone by cubic foot; water tables and base courses by lineal feet. All sills, lintels or ashlar, by superficial feet, and no wall less than eighteen inches thick.

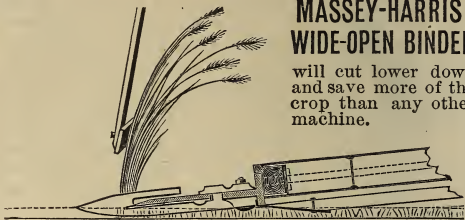


**A**FTER years of strongest opposition, competitors now acknowledge the **Open-End** principle to be the correct one for Self Binders.

Unfortunately for them, however, in their attempts to copy the "MASSEY-HARRIS," they find a lot of patents in their way. They cannot make an upper floating Elevator Canvas Belt, without which no Open-End Machine can succeed. See it in cut above. Note also 7th Roller.

## MASSEY-HARRIS WIDE-OPEN BINDER

will cut lower down  
and save more of the  
crop than any other  
machine.



### BRICK WORK.

Brick-work is generally measured by 1000 bricks laid in the wall. In consequence of variations in size of bricks, no rule for volume of laid brick can be exact. The following scale is, however, a fair average:

7 Common Bricks to a super. ft. 4-in. Wall.			
14	"	"	9-in. "
21	"	"	13-in. "
28	"	"	18-in. "

Corners are not measured twice as in stone work. Openings over two feet square are deducted. Arches are counted from the spring. Fancy work counted  $1\frac{1}{2}$  bricks for one. Pillars are measured on their face only.

A cubic yard of mortar requires one cubic yard of sand and 9 bushels of lime, and will fill 30 hods.

One thousand bricks, closely stacked, occupy about 56 cubic feet.

One thousand old bricks, cleaned and loosely stacked, occupy about 72 cubic feet.

Stock bricks commonly measure  $8\frac{3}{4}$  inches by  $4\frac{1}{4}$  inches by  $2\frac{3}{4}$  inches, and weigh from 5 to 6 lbs. each.

### POSTAGE RATES.

Letters.—3 cents for each 1 oz. Newspapers, 1 cent for each 4 ozs. Books (limit 5 lbs.), 1 ct. for each 4 ozs.

Parcels, closed, containing no correspondence (limit 5 lbs.), 6 cents for each 4 ozs.

Parcels, not sealed, 1 cent for each oz.

Patterns and Samples (*bona fide*) of Merchandise, put up so as to admit of inspection (limit 24 oz.), 1 cent for each 4 ozs.

Registration—Letters, Parcels and Samples, 5 cents

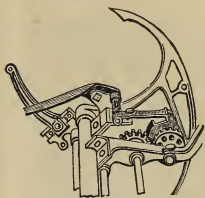
United States.—Letters 3 cents for each 1 oz. Newspapers, 1 cent for each 4 ozs. Books (limit 5 lbs.) 1 cent for each 2 ozs.

Parcels, Patterns and Samples, (limit 8 ozs.) 2 cents for first oz., and 1 cent for each additional 2 ozs.

### FOREIGN POSTAGE.

Letters 5 cents for each half oz. Papers, 1 cent for each 2 oz. Registration 5 cents. Books (limit 4 lbs.), 1 cent for each 2 ozs.

Parcels (limit 7 lbs.), Great Britain, Japan (5 lbs.) 25 cents per lb., and Newfoundland, 15 cents per lb., must be prepaid. For other points enquire at Post Office.

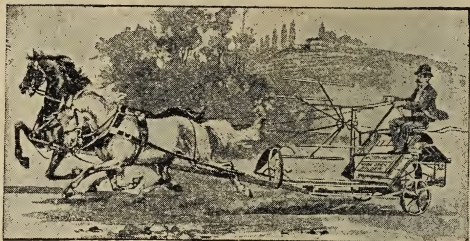


## THE BINDING ATTACHMENT

of the "MASSEY-HARRIS" is free from all unnecessary complication, and is light, strong, simple and easily understood. The Weight Trip shown in the cut automatically makes small bundles in damp, weedy grain and large bundles in

light, dry straw. The Knotter is very complete, quite simple, does its work well, and gives no trouble.





### MONEY ORDERS.

On orders payable in the Dominion of Canada. LIMIT \$100.	{	On orders up to \$ 4 00....	2 cents
		Over \$ 4 00 up to 10 00....	5 "
		" 10 00 " 20 00....	10 "
		" 20 00 " 40 00....	20 "
		" 40 00 " 60 00....	30 "
		" 60 00 " 80 00....	40 "
In the United King- dom, U.S., all For- eign Countries and British Possessions LIMIT \$50	{	" 80 00 " 100 00....	50 "
		On orders up to \$10 00....	10 cents
		Over \$10 00 " 20 00....	20 "
		" 20 00 " 30 00....	30 "
		" 30 00 " 40 00....	40 "
		" 40 00 " 50 00....	50 "

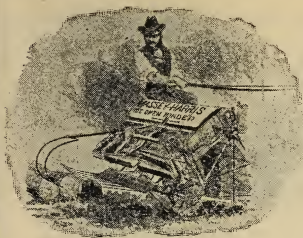
### HOW TO MIX TINTS.

Red and Black.....	makes	Brown.
Lake and White.....	"	Rose.
White and Brown.....	"	Chestnut.
White, Blue, and Lake.....	"	Purple.
Blue and Lead Color.....	"	Pearl.
White and Carmine.....	"	Pink.
Indigo and Lampblack.....	"	Silver Gray.
White and Lampblack.....	"	Lead Color.
Black and Venetian Red.....	"	Chocolate.
White and Green.....	"	Bright Green
Purple and White.....	"	French White.
Light Green and Black.....	"	Dark Green.
White and Emerald Green.....	"	Brilliant Green.
Red and Yellow.....	"	Orange.
White and Yellow.....	"	Straw Color.
White, Lake, and Vermilion.....	"	Flesh Color.
Umber, White, and Venetian Red.....	"	Drab.
White, Yellow, and Venetian Red.....	"	Cream.
Blue, Black, and Red.....	"	Olive.
Yellow, White, and Venetian Red.....	"	Buff.

### CONTAGIOUS AND ERUPTIVE DISEASES.

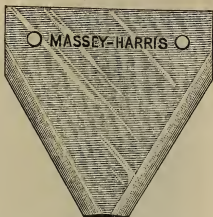
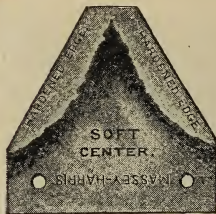
It will often relieve a mother's anxiety to know how long after a child has been exposed to a contagious disease there is danger that the disease has been contracted. The following table gives the *period of incubation*—or anxious period—and other information concerning the more important diseases:





## MASSEY-HARRIS -TRANSPORT- TRUCK

AND SHEAF CARRIER  
are very superior  
attachments. The  
Carrier is automa-  
tic when striking  
obstructions. It is  
easily controlled  
and operated by  
the foot.



KNIFE SECTION IN THE ROUGH, SHOWING HARD EDGE AND SOFT CENTRE, AND ALSO FINISHED SECTION.

(Contd. from p. 44.)

Disease.	Symptoms appear within	Days of anxious period.	Patient is Infectious.
Chicken-pox .....	14 days	10-18	Till scabs gone.
Diphtheria.....	2 "	2-5	14 days after membrane is gone.
Measles .....	14 "	10-14	*Until scaling and cough ceased.
Mumps .....	10-22 "	16-24	14 days after commencement.
Rötheln.....	14 "	12-20	10 to 14 days from commencement.
Scarlet fever.....	4 "	1-7	Till scaling quit.
Small-pox .....	12-17 "	1-14	Until scabs fallen.
Typhoid fever ...	11 "	1-28	Till diarrhoea quit.
Whooping-cough	14 "	7-14	†6 weeks from beginning to whoop.

\* In measles the patient is infectious three days before the eruption appears.

† In whooping-cough the patient is infectious during the primary cough, which may be three weeks before the whooping begins.

### PROMISSORY NOTES.

A promissory note is an unconditional written promise to pay to a specified person, a specified sum at a specified time. The person making the note is called the maker.

A note given on Sunday is void.

Notes bear interest only when so expressed; after due, however, they draw legal rate, six per cent. per annum. Notes payable on demand or sight draw no interest until after demand or presentation, unless providing for interest on their face.

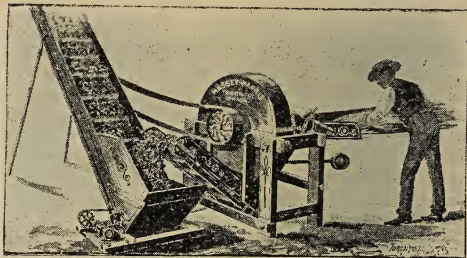
If "with interest," is included in a note, and no rate specified, it draws the legal rate. If a note is to draw interest higher than legal interest, it must be so specified.

When transferring a note the endorser frees himself from responsibility of payment by writing "Without recourse," on the back above the name.

When a note is made payable at a definite date, three days of grace are allowed beyond that time to make payment. Notes payable on demand are not entitled to grace.

Notes due on Sunday or a legal holiday become due and payable on the following day.





(Contd. from p.46.)

If a note has been lost, mislaid, or destroyed, it does not release the maker from obligation, but the holder must make the formal demand, offering the maker a sufficient indemnity in the event of his paying the same.

### HOW TO MAKE A WILL.

A duty which every man owes to his family is the making of a will. An instrument of this kind can be drawn by any intelligent person, and will be admitted to probate in all courts, provided the document is in writing, and signed at the end by a testator, or some person in his presence and by his direction, in presence of two witnesses at least, who must subscribe and attest the will in his presence. The signature must be so placed at the end of will that it shall be apparent that the testator intended to give effect by the signature to the writing signed as his will. A provision of this kind will save annoyance and expense, and prevent litigation.

### DRAFTS.

A draft is an unconditional written order made by one person, called the drawer, and directed to another, requiring the latter to pay a specified sum to the drawer, or a third person, or to his "order," or to "bearer."

Drafts may be made "at sight," a certain number of days "after sight," a certain number of days "after date," or "on demand." Three days "grace" is allowed on all but the latter. It furnishes a means frequently used for collecting accounts.

The acceptance of a Draft, which means agreement to its terms, is made in writing, and it is customary to make it across the face of the instrument in red ink.

Bank drafts or bank cheques are generally used for transmitting money, and as a medium of exchange between distant points, to obviate the cost and risk of sending the money itself.


### MORTGAGES.

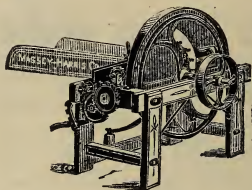
A mortgage is a conveyance of property, personal or real, given to secure the payment of a debt. As soon as the debt is paid, or the duty performed, the mortgage is void and of no value.

(Contd. on p.50.)

## NEW MASSEY-HARRIS ENSILAGE CUTTER.

The lightest and nicest running Cutter ever made. Fitted with Roller Bearings, is strongly built, has great capacity, cuts 6 different lengths. Carriers (supplied up to 56 feet in length) deliver in three different directions. Feeders can be instantly reversed or stopped at pleasure. This splendid machine is very complete in every particular.





## MASSEY-HARRIS... ....STRAW CUTTER

adapted for steam or horse power. It cuts 3 lengths, and has a capacity of one ton per hour. Knives can be instantly stopped and the feed re-

versed by touching a lever, thus avoiding accidents.

*(Contd. from p. 48.)*

Where real estate is mortgaged it is usually provided that the mortgagor (person mortgaging property), shall, until default, retain possession of the property, and receive its rents and other profits, paying all taxes, repairs, insurance and liens upon it.

In case either real estate or chattels are pledged, the mortgage must be properly executed, like a deed, before a witness, who must make an affidavit of execution.

Personal property may pass into the possession of the mortgagee, if such is the contract, or the mortgagor may continue to hold and use it, if such be the agreement.

Mortgages must be in writing, or partly printed and partly in writing, contain a redemption clause, be signed and sealed by mortgagor, properly witnessed and recorded—chattel mortgages within five days from execution thereof—in office of County Court Clerk, and real estate mortgages with Registrar of District in which property is located.

Chattel mortgages are valid only for one year from date unless renewed. If renewed it must be done within thirty days previous to such expiration. Great care should be exercised to see that affidavits are properly executed.

The times of payment of interest and principal sum must be distinctly stated in mortgage, and the property carefully described with its location.

A mortgage may be drawn so that a single failure to pay the interest at a stated time may render due the whole sum, principal and interest, and permit the mortgagee (person to whom mortgage is given), to sell the property upon taking the necessary legal steps, long before the date of its maturity.

The foreclosure of a mortgage is the legal declaration that the property has been forfeited to the mortgagee.

### CHEQUES.

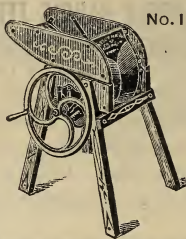
A cheque is an unconditional order drawn by a person on his banker, instructing said banker to pay to himself or another, a certain sum in cash out of funds the maker has already deposited with his banker.

Always draw a cheque to "order," instead of to "bearer," thus: "Pay John Smith, or order," instead

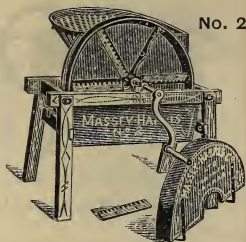
*(Contd. on p. 52.)*







No. 1



No. 2

(Contd. from p 50.)

of "John Smith, or bearer." It then becomes a receipt also, and is more definite if you state in the body of the cheque for what it is given in payment.

A cheque drawn to a person's "order," cannot be cashed without that person's endorsation, which will be the evidence that he has received value therefor.

Care should be taken in filling cheques that it is done in a manner which will not allow of any alteration.

Never draw a cheque unless the money is in the bank.

### LEASES.

The person leasing real estate to another is termed the landlord, and the person occupying such property is called the tenant. These parties are known in the law as the *lessor* and the *lessee*. A lease should state plainly the terms and conditions, so there may be no misunderstanding between landlord and tenant.

It is essential that the lease state all the conditions, as additional and verbal promises and agreements avail nothing at law. It is held, generally, that the written instrument contains all the details, and states the bargain entire as the contracting parties intended.

The tenant can sub-let a part or all of his premises, unless prohibited by the terms of the lease.

A guardian or a minor cannot give a lease extending beyond the ward's majority, which can be forced by the lessee; yet the latter is bound unless the lease is annulled.

Duplicate copies should always be made of a lease, and each party should retain a copy.

A new lease to the same person invalidates an old one.

A lease on property that is mortgaged ceases to exist when the party holding the mortgage forecloses, if the mortgage is prior to the lease.

A landlord consenting to take a substitute releases the first tenant.

When there is only a verbal agreement, tenancy is understood to commence at the time of taking possession. When there is no time specified in the lease tenancy is regarded as commencing at the time of delivering the writings.

If it is understood that the tenant is to pay the taxes upon the property he occupies, it must be so stated in the lease

# MASSEY-HARRIS ROOT CUTTERS AND PULPERS

are sold in very large numbers and are general favorites. Being fitted with Roller Bearings, they run with great ease. No. 1, with Concave patented Cylinder, is a fine tool and does its work to perfection. No. 2 is of the side-wheel type. The knives are reversible, one edge being toothed for pulping.

Decorative diamond separator line

Below the separator line is a series of horizontal lines for writing.



## MASSEY-HARRIS ROLLER BEARINGS

like other "MASSEY-HARRIS" features, are scientifically constructed. The Rollers are of a high grade of steel, and of a sufficiently large size to be of actual service. The frame or holder for the Rollers is a nice piece of work.

## DEEDS.

A deed is an instrument in writing by which lands and appurtenances thereto are conveyed from one person to another, signed, sealed and properly witnessed. A deed may be written or partly printed, and must be executed by parties competent to contract.

A complete description of the property transferred, with its location, must be made in the deed before execution.

The law provides that a deed must be executed before a witness, who must make affidavit of such execution before a justice of the peace or notary public. One witness to the signatures is required.

To enable a person legally to convey property to another, the following requisites are necessary: First, he or she must be of sane mind; second, of age; third, the rightful owner of the property.

The maker of the deed is termed the grantor, the person in whose favor it is made the grantee. The wife of the grantor, in the absence of any statute governing the same, must also execute the deed, or else, after the death of her husband, she will be entitled to one-third interest in the property as dower during her life.

Special care should be taken to have the deed properly executed and witnessed, and the proper seals attached.

The deed takes effect upon delivery to the person authorized to take it.

Any alterations or interlineations in the deed should be noticed on the margin of the instrument and properly witnessed. After the execution of the deed the parties may not make the slightest alterations. An alteration after delivery of the deed in favor of the grantee vitiates the deed.

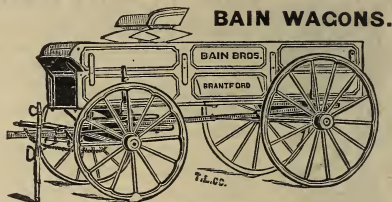
A quit-claim deed releases what interest the grantor may have in the property, but does not warrant or defend the title against others.

Deeds, upon their delivery, should be recorded in the Registry Office without delay.

## BONDS.

A Bond is a written acknowledgment of a debt under seal. No technical form of words is necessary. The person giving the bond is called the obligor, and he to whom it is given the obligee.





### HOW TO TELL AGE.


Hand this table to a young lady, and request her to tell you in which column or columns her age is contained, and add together the figures at the top of the columns in which her age is found, and you have the secret. Thus, suppose her age to be 17, you will find that number in the first and fifth columns; add the first figures of these two columns.

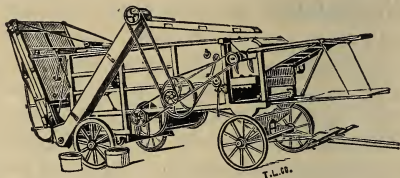
1	2	4	8	16	32
3	3	5	9	17	33
5	6	6	10	18	34
7	7	7	11	19	35
9	10	12	12	20	36
11	11	13	13	21	37
13	14	14	14	22	38
15	15	15	15	23	39
17	18	20	24	24	40
19	19	21	25	25	41
21	22	22	26	26	42
23	23	23	27	27	43
25	26	28	28	28	44
27	27	29	29	29	45
29	30	30	30	30	46
31	31	31	31	31	47
33	34	36	40	48	48
35	35	37	41	49	49
37	38	38	42	50	50
39	39	39	43	51	51
41	42	44	44	52	52
43	43	45	45	53	53
45	46	46	46	54	54
47	47	47	47	55	55
49	50	52	56	56	56
51	51	53	57	57	57
53	54	54	58	58	58
55	55	55	59	59	59
57	58	60	60	60	60

### SPRAINS.

Elevate the limb; keep the joint perfectly quiet; apply lukewarm lotions or fomentations. When inflammation has ceased, apply stimulating liniments and bandages; shower the parts with cold and warm water alternately.

**BAIN WAGONS** have so long been built and sold in Canada, and there are now so many of them in use that the name itself has become a guarantee of high class Wagons. You sometimes hear it said, "As good as Bain's." Be sure you get the genuine Bain, however. The new Bain works at Woodstock are being equipped with all the latest machinery and devices for turning out thoroughly up-to-date Wagons.





"PEERLESS," and other Separators made by SAWYER & MASSEY CO., LTD., have long been recognized as models.

## THE HUMAN BODY.

The average height of a newly born infant is 18 inches; average weight, 6.77 lbs. The average weight of the newly born male child is  $7\frac{1}{2}$  lbs., of the female child,  $6\frac{3}{4}$  lbs. It takes three years for the child to grow the second 18 inches, so as to be 3 feet high.

Average weight of adult male, 145 lbs.; height, 5 ft. 7 inches; chest measurement of male, 36 inches; drawing strength between hands, 75 lbs.

The skeleton is one inch shorter than the measurement of the living person; skeleton weighs about 14 lbs.; there are 240 bones. The body contains about 28 lbs. of blood; about  $6\frac{1}{2}$  oz. pass through the heart in each beat, and in adults from 65 to 75 beats occur per minute. All this passes through the lungs and is revived by the oxygen of the air—a bright-red blood goes by the subdivisions of the arteries to every minutest portion of the body, and returns laden with impurities as dark venous blood through the veins to the heart again.

The heart is a little larger than the fist, and weighs about 9 to 11 oz.

The adult male brain weighs 49 to 50 oz., female 44 to 45 oz.; the nerves of motion and sensation from every portion of the body end in the brain and spinal cord.

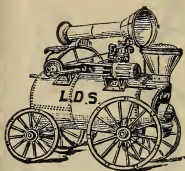
The lungs consist of about 174 million sacs or cells at the end of minute tubes that unite to form larger tubes, and these form the two bronchial tubes, which unite in the windpipe, opening into the mouth and nose. At each breath the lungs are filled with about a gallon of air, the only purpose of which is to oxygenate the blood. The blood absorbs about 30 oz. of oxygen per day, sufficient to consume in the tissues of the body the carbon from about 3 lbs. of bread.

The stomach lies beneath the lungs, near the centre of the body, and is a sac of a capacity of about a pint (without distension), in which the food is changed by the digestive juices and ferments.

The liver, to the right, and beneath the stomach, weighs about 4 to 5 lbs.; it changes the starch of foods to sugar, secretes bile, and otherwise aids in digestion.

Spleen, to left of stomach, about the size of fist, weighs 5 to 7 oz.; functions undetermined.





## THE HAMILTON ENGINE & THRESHER WORKS

was established in 1836. Its thorough, careful and conservative methods have won a national reputation for high-class, mechanically perfect Engines and Threshers. The "L. D. S." or "Sawyer-Massey" portable and traction

Engines are the very best. SAWYER & MASSEY Co., Ltd., HAMILTON, ONT.

MASSEY-HARRIS  
MODEL I.



(Contd. from p. 58.)

The intestines, about 34 feet in length; the digestion of the food and the absorption of its nutrient qualities into the lacteals and the blood are completed in the intestines.

The two kidneys weigh about  $4\frac{1}{2}$  oz.; about 1,000 oz. of blood pass through them in an hour, and by them the waste fluid portions of the food not useful to the blood are strained out. The waste fluids of the body are also exuded through the pores of the skin. The area of the surface of the body is about 2,500 square inches, it contains about 7,000,000 pores, each about  $\frac{1}{4}$  of an inch long, or a total length of nearly 28 miles of pores.

The secretions of the body—saliva, gastric juice, chyle, bile, etc., which are absorbed from the blood, and reabsorbed by it in twenty-four hours—amount to 25 lbs. Adults require eight or nine hours' sleep.

### WORDS IN THE ENGLISH LANGUAGE.

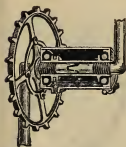
Shakespeare, who had the richest vocabulary used by any Englishman, employed only 16,000 words. Milton could pick out from 8,000; but the average man, a graduate from one of the great universities, rarely has a vocabulary of more than 3,000 or 4,000 words. The ordinary person can get along very comfortably with 500 words, and in the rural districts a knowledge of 200 words is sufficient to carry a man through his life. This of course refers to the needs of conversation. If a man wants to read newspapers and well-written books, he must know at least 2,000 words.

### SIMPLE RULES FOR SPELLING.

Words ending in *e* drop that letter before the termination *able*, as in move, movable, unless ending in *ce* or *ge*, when it is retained, as in change, changeable, etc.

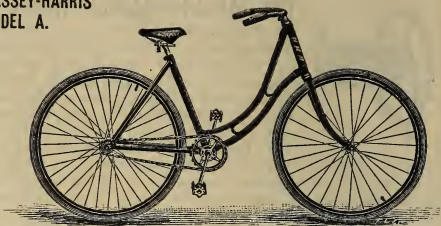
Words of one syllable ending in a consonant, with a single vowel before it, double that consonant in derivatives, as ship, shipping, etc. But if ending in a consonant with a double vowel before it, then do not double the consonant in derivatives, as troop, trooper, etc.

(Contd. on p. 62.)



**THE MASSEY-HARRIS WHEEL** has more good points than any other. The **Tubing** is the very best, and the frames are scientifically brazed, and are very rigid and strong. The **Crank Bracket** is patented and is admirably constructed. Cranks and axles are practically one piece, but easily and quickly taken off. **Tread** is  $5\frac{1}{2}$  in. **Balls** are  $\frac{3}{8}$  in., thus

minimizing the friction. The Brackets are all made from solid steel forgings, and are not of stamped metal as in the case of low grade wheels. Model 1. (Men's Wheel) supplied with 20, 23, 25 & 27 in. frames.



(Contd. from p. 60.)

Words of more than one syllable ending in a consonant preceded by a single vowel, and accented on the last syllable, double that consonant in derivatives ; as commit, committed ; but except chagrin, chagrined.

All words of one syllable ending in *l*, with a single vowel before it, have *ll* at the close ; as mill, sell.

### THE AGE OF HORSES.

To tell the age of any horse,  
Inspect the lower jaw, of course ;  
The six front teeth the tale will tell,  
And every doubt and fear dispel.

Two middle "nippers" you behold  
Before the colt is two weeks old,  
Before eight weeks two more will come ;  
Eight months the "corners" cut the gum.

The outside grooves will disappear  
From middle two in just one year.  
In two years, from the second pair ;  
In three, the corners, too, are bare.

At two the middle "nippers" drop ;  
At three, the second pair can't stop.  
When four years old the third pair goes ;  
At five a full new set he shows.

The deep black spots will pass from view  
At six years from the middle two.  
The second pair at seven years ;  
At eight the spot each "corner" clears.

From middle "nippers," upper jaw,  
At nine the black spots will withdraw.  
The second pair at ten are white ;  
Eleven finds the "corners" light.

As time goes on, the horsemen know,  
The oval teeth three-sided grow ;  
They longer get, project before  
Till twenty, when we know no more.



**THE MASSEY-HARRIS WHEEL** has been carefully and scientifically designed in every detail. **The Hubs** are of the

large barrel pattern, with corresponding advantages. **The Season of '96** has proved this wheel to be all that is claimed for it—it gives universal satisfaction. They are already being shipped in large quantities to foreign lands. It is an every-day wheel, and a wheel for everybody—strong and rigid enough for the heaviest use—light and fleet enough for the race track. It is **The People's Wheel**, built and sold on honest business principles.

Model A. (Woman's Wheel) supplied with 19 & 22 inch frame.

## INDEX AS TO IMPLEMENTS, ETC.

	Page.
Bean Implement .....	8-9
Bicycles .....	60-63
Binders .....	38-44
Clover Table .....	31
Corn Implement .....	8-9
Cultivators .....	4-7
Cutters .....	46-53
Drills .....	16-19
Engines .....	59
Harrows .....	10-13
Hay Tedder .....	36
Mowers.....	20-30
Plows .....	2-3
Pulpers .....	53
Rakes .....	32-35
Reapers .....	37
Roller Bearings.....	54-55
Seeders.....	16-17
Separators.....	58
Sheaf Carriers .....	45
Transport Truck .....	45
Wagons.....	56-57

## INDEX AS TO USEFUL INFORMATION.

	Page.
Accidents ... ..	36
Acreage Table.....	1
Age Expectancy .....	16
Age of Horses .....	62
Age Telling .....	56
Antidotes. ....	32
Barbed Wire.....	8
Barometer .....	28
Bonds.....	54
Box Measure.....	4
Brick Work .....	42
Builders' Facts.....	40
Burns .....	30
Canadian History ...	22
Capacity of Cistern ..	14
Chances of Marrying..	28
Cheques.....	50
Circle .....	2
Compasses .....	8
Contagious Diseases..	44
Deeds .....	54
Distances .....	34
Drafts.....	48
Drowning .....	26
Emergencies .....	36
English Language ...	60
Eruptive Diseases ...	44
Expectancy of Age...	16
Facts for Builders....	40
Frost Bites.....	30
Grain Shrinkage.....	2
Grain Measure.....	2
Grammar .....	6
Hay Measurement....	2
Human Body.....	58
Knots .....	10
Leases .....	52
Lime Washes .....	32
Measurement of Hay .	2
Measures.....	4
Miscellan's Weights..	4
Mixing Tints.....	44
Money Orders.....	44
Mortgages .....	48
Nails per lb .....	14
Poisoning .....	32
Populations .....	34
Postage Rates .....	42
Preserve from Rust...	28
Promissory Notes.....	46
Properties of Circle...	2
Ready Reckoner.....	20
Removing Rust.....	26
Saving Money .....	6
Scalds .....	30
Seed to Acre.....	1
Shallow water .....	24
Short Grammar .....	6
Shrinkage of Grain...	2
Simple Spelling.....	60
Splices .....	10
Sprains .....	56
Square Box Measure .	4
Stone Work.....	40
Strength of Ice .....	14
Strength of Rope .....	8
Suffocation .....	26
Sundry Measures.....	4
Sun Stroke.....	30
Tacks, per lb .....	14
Telling Age .....	56
Tints .....	44
Velocity, Bodies.....	15
Velocity of Wind.....	15
Washes .....	32
Watches .....	8
Weather Wisdom .....	18
Weights, Miscellan's .	4
Weight of Rope.....	8
Weight of Wire .....	8
Wills.....	48
Wind .....	16
Wire required .....	8
Words .....	60



# CALENDAR.

1896	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Jan.	5	6	7	8	9	10	11
	12	13	14	15	16	17	18
	19	20	21	22	23	24	25
Feb.	26	27	28	29	30	31	...
	2	3	4	5	6	7	8
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	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
Mar.	1	2	3	4	5	6	7
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	15	16	17	18	19	20	21
	22	23	24	25	26	27	28
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Apr.	5	6	7	8	9	10	11
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1896	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
May	3	4	5	6	7	8	9
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	21	22	23	24	25	26	27
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Aug.	2	3	4	5	6	7	8
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1896	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Sept.	1	2	3	4	5	6	7
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Oct.	4	5	6	7	8	9	10
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	25	26	27	28	29	30	31
Nov.	1	2	3	4	5	6	7
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# CALENDAR.

1897	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Jan.	3	4	5	6	7	8	9
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	24	25	26	27	28	29	30
Feb.	31	1	2	3	4	5	6
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Mar.	1	2	3	4	5	6	7
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	22	23	24	25	26	27	28
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Apr.	4	5	6	7	8	9	10
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1897	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
May	12	13	14	15	16	17	18
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June	30	31	1	2	3	4	5
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July	4	5	6	7	8	9	10
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	18	19	20	21	22	23	24
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Aug.	1	2	3	4	5	6	7
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1897	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Sept.	5	6	7	8	9	10	11
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Oct.	3	4	5	6	7	8	9
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Dec.	5	6	7	8	9	10	11
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# CALENDAR.

1898	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Jan.	9	10	11	12	13	14	15
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Feb.	6	7	8	9	10	11	12
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Mar.	6	7	8	9	10	11	12
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Apr.	3	4	5	6	7	8	9
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1898	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
May	1	2	3	4	5	6	7
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June	5	6	7	8	9	10	11
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July	3	4	5	6	7	8	9
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	24	25	26	27	28	29	30
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Aug.	1	2	3	4	5	6	7
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1898	Sun.	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.
Sept.	4	5	6	7	8	9	10
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Oct.	2	3	4	5	6	7	8
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Nov.	6	7	8	9	10	11	12
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Dec.	4	5	6	7	8	9	10
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	25	26	27	28	29	30	31



# MASSEY HARRIS WIDE-OPEN BINDER



GREATEST ACHIEVEMENT IN SELF-BINDING MACHINERY



GREATEST ACHIEVEMENT IN MOWING MACHINERY



TORONTO AND BRANTFORD MOWERS